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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/734,847 | 12/11/2003 | Burton Warren Hanson | 7747.2US01 | 1989 |
| 23552 | 7590 | 03/18/2005 | EXAMINER | |
| MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903 | | | BRITTAIN, JAMES R | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3677 | |

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/734,847

Applicant(s)

HANSON, BURTON WARREN

Examiner

James R. Brittain

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☒ Claim(s) 2,5,10,11,15-17,19,24,25,27 and 29-31 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 03292004; 09272004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION***Drawing Objections***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the cam of each directionally oriented notch on the ratchet wheel being remote from the second anchoring line attachment means (claims 11, 25) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 2, 5, 10, 11, 15-17, 19, 24, 25, 27, 29, 30 and 31 are objected to because of the following informalities: The following terms lack clear antecedent basis: "the tension line" (claim 2, line 2); "the two parallel plates" (claim 5, line 2; claim 19, line 2); "the cam of each directionally oriented notch on the ratchet wheel" (claim 10, lines 1-2; claim 11, lines 1-2; claim 24, lines 1-2; claim 25, lines 1-2); "it" (claim 15, line 2; claim 29, line 2) can refer to any structure; "the ratcheting system" (claim 16, line 5); "the spring" (claim 27, line 1) can refer to either the spring of claim 17 or of claim 26; "the drive part" (claim 30, line 1); and "the first end" (claim 31, line 10). Claims 2 and 31 are further objected to because they don't end in a period and claims must end in a period. The limitation "the spring braces blocking pawl" (claim 17, line 12) is unclear in context and it would appear that --the-- should be inserted before "blocking". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 17-30 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The limitation “a drive pawl pivotably attached to the pivot lever” (claim 17, line 8) is misdescriptive because the drive pawl is slidably attached to the pivot lever as indicated in claim 26. The subject matter of claim 26 can only further limit that of claim 17 and since the only species shown clearly has the drive pawl slidably attached to the pivot lever, the limitation is being interpreted as the drive pawl is slidably attached to the pivot lever. The remaining claims are indefinite because they depend from an indefinite claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. §102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 31 is rejected under 35 U.S.C. §102(b) as being clearly anticipated by DE 3017371.

DE 3017371 (figures 2, 3) teaches a method for changing the direction of the power stroke associated with a bi-directional tensioning device of the type having a first and second anchoring line attachment means from “push” (figure 2) to “pull” (figure 3) comprising:

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detaching the threadable line 3, 21 from the ratcheting system 2, 26 of the bi-directional tensioning device; detaching the anchoring line 24 from the first anchoring line attachment means 13; attaching the anchoring line 24 to the second anchoring line attachment means 18; and feeding the threadable tensioning line into the ratcheting system from the first end of the device.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 7, 10-12, 14, 16-19, 21, 24-26, 28 and 30 are rejected under 35 U.S.C.

§103(a) as being unpatentable over DE 3017371 in view of Dolezych (EP 311828).

DE 3017371 (figures 2, 3) teaches a bi-directional tensioning device for tensioning an anchoring line 24 and a threadable line 3, 21 comprising: a ratcheting system 2, 26 serving to wind the threadable line; a first and second anchoring line attachment means 13, 18 positioned on opposite ends of the ratcheting system, wherein the anchoring line may be removably attached to either anchoring line attachment means. The difference is that the bi-directional tensioning device of DE 3017371 lacks a first and second guide means to aid in winding the threadable line. However, Dolezych (EP 311828, figure 1) teaches tensioning device structure including a ratcheting system and guide shafts 2, which are spaced from shafts 3 so as to aid in defining slots for the two straps to pass through. The guide shafts 2 number three with one at each end and the third located next to the blocking mechanism. As control of the tensioning device of DE 3017371 would be desirable so as to prevent swings away from the straps, it would

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have been obvious to modify the tensioning device of DE 3017371 so that it would have first and second guides to aid in guiding the threadable line as taught by Dolezych (EP 311828). As to claims 10 and 11, the tensioning devices of DE 3017371 and Dolezych (EP 311828) have the cam surfaces of the teeth oriented to have either a “push” or “pull” power stroke, thereby rendering obvious the subject matter of these claims. In regard to claim 14, the tensioning device of DE 3017371 is considered to be lengthened. As to claims 7 and 21, the guide shafts 2 of Dolezych (EP 311828) are circular in cross-section and therefore have a gradient that is curved.

Claims 6 and 20 are rejected under 35 U.S.C. §103(a) as being unpatentable over DE 3017371 in view of Dolezych (EP 311828) as applied to claims 5 and 19 above, and further in view of Speich (US 4584742).

Further modification of the bi-directional tensioning device of DE 3017371 as modified by Dolezych (EP 311828) such that the guide shafts 2 of Dolezych (EP 311828) are bolts would have been obvious in view of Speich (figure 1) teaching the desirability of using a guide shaft formed by a rotatable sleeve 17 mounted on a bolt 20 so as to permit removal of the guide and easier threading of the strap.

Claims 13, 15, 27 and 29 are rejected under 35 U.S.C. §103(a) as being unpatentable over DE 3017371 in view of Dolezych (EP 311828) as applied to claims 2, 12, 17 and 26 above, and further in view of Huang (US 5778496).

Further modification of the bi-directional tensioning device of DE 3017371 such that a torsional spring biases the drive pawl and the drive pawl is provided with a handle by means of which it may be actuated would have been obvious in view of Huang (figure 1) teaching that a

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torsion spring 22 provides a compact spring for biasing the slidable drive pawl 21 and that a handle 211 is useful to control the drive pawl.

Claims 8, 9, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 3017371 in view of Dolezych (EP 311828) as applied to claims 2 and 17 above, and further in view of Berg (US 5832569).

Further modification of the bi-directional tensioning device of DE 3017371 as modified by Dolezych (EP 311828) such that the guide shafts 2 of Dolezych (EP 311828) comprise a support surface between the parallel plate members spaced from the anchoring means would have been obvious in view of Berg (figure 8) suggesting the use of a series bars 19, 23 extending between the parallel plate members, acting as support surfaces and guiding the strap so as to have a simpler connection of the strap to the tensioning device.

Conclusion

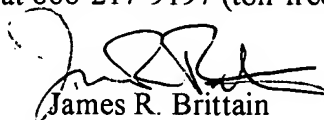
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patent of Sunesson (US 4199182, figures 1, 3) teaches pertinent tensioning device structure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James R. Brittain whose telephone number is (703) 308-2222. The examiner can normally be reached on M-F 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (703) 306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



James R. Brittain
Primary Examiner
Art Unit 3677

JRB